

ABSTRACT

A UV-assisted advanced-ozonation water treatment system comprises a water treating tank 1, an ozonic water tank 2, an ozonized gas generator 3, and a UV light source 4 disposed in the water treating tank 1 and having a UV-radiating surface 4a, and an ozonic water jetting device including jetting nozzles 5 for jetting the ozonic water onto the UV-radiating surface of the UV light source. An ozonized gas diffusing device 12 is placed in the ozonic water tank 2.

10 An ozonized gas generated by the ozonized gas generator 3 and compressed by a compressor 13 at a pressure in the range of about 2 to about 3 kg/cm<sup>2</sup> is diffused into the ozonic water tank 2 by the ozonized gas diffusing device 12. A high-pressure, a high-ozone-concentration ozonic water produced in the

15 ozonized water tank 2 is jetted through the jetting nozzles 5 onto the UV-radiating surface 4a.